

# Apache Geronimo Prime Time

- **By Jeff Genender**

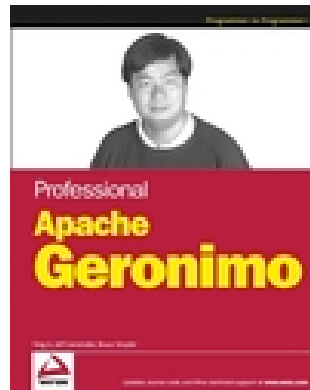


APACHE  
**GERONIMO**

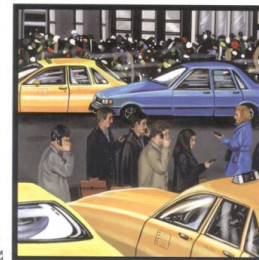
# Jeff Genender



## APACHE GERONIMO



### Enterprise Java SERVLETS



Jeff M. Genender



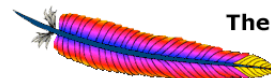
Java Community Process

JSR 244  
Java EE 5

# Topics

- **What is Geronimo?**
- **Architecture**
- **Using Geronimo**
- **Configuring Geronimo**
- **What Geronimo doesn't have**
- **Concerns...**
- **Whats Next?**

# What is Geronimo?



The Apache Directory Project

<http://directory.apache.org/>

# What is Geronimo?

Is It J2EE?



# What is Geronimo?



# What is Geronimo?

- **Collection Pre Configured Assemblies**
  - j2ee-tomcat-server
  - j2ee-jetty-server
  - minimal-tomcat-server
  - web-jms-tomcat-server
- **Is it J2EE? Yes!**
  - J2EE 1.4 Certified
- **Why another J2EE Server?**
  - J2EE is commodity
  - Apache License is good!
  - Future certified stacks

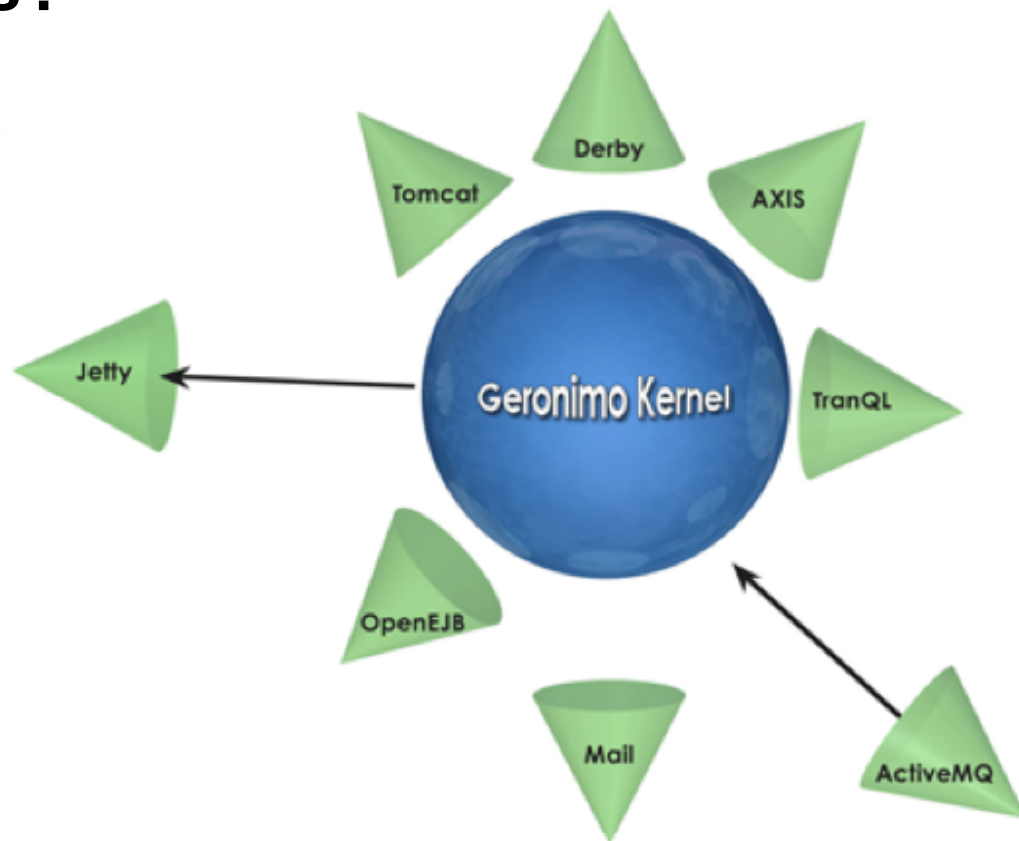
# What is Geronimo?

## ● Top Level Apache Project

- The Geronimo API/Kernel/Assemblies/App Server
- GBuild - Open Source Testing
- DevTools - Eclipse Plugin For Geronimo Application Development With the Web Tools platform (WTP)
- J2EE Specifications - Open Source Version
  - Great for Maven Repo!
- Home for OpenEJB, ActiveMQ, ServiceMix, Yoko (CORBA), XBean
  - These are Stand Alone Sub-Projects

# Architecture

- **What makes Geronimo different from all other app servers?**



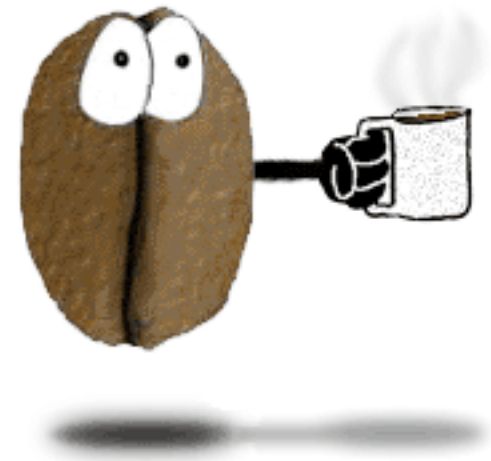
## Architecture - Kernel

- **Kernel - This \*is\* what is known as Geronimo!**
- **Kernel control's component (GBean) Lifecycle**
- **Manages Dependencies (Which GBean depends on what)**
- **IoC (Inversion of Control) container**



# Architecture - GBeans

- **JSR-77 (J2EE Management Specification)**
  - Lifecycle & Running States
  - Naming Conventions
- **Enough Jargon! What's a GBean?**
  - The Glue
  - The Wrapper
  - The Plugin to the Kernel



## Architecture - GBean

```
public interface GBeanLifecycle {  
    public void doStart();  
    public void doStop();  
    public void doFail();  
}
```

# Architecture - GBean

## ● Simple Development

- Implement the GBeanLifecycle
- Declare the GBean in a Plan (IoC) and Deploy It!

## ● Plugging in 3rd party components is easy!

- Apache Directory
- Quartz - Open Symphony Integration
  - <http://www-128.ibm.com/developerworks/library/os-ag-thirdparty/index.html>

## ● Do I care?

- Yes, because its how you configure Geronimo
- No, because you probably will never write one (this is architecture)

Enough already! Lets get on to the good stuff...

# Architecture - GBean IoC with the Plan File

...

```
<gbean gbeanName="geronimo.server:name=DirectoryService"
      class="org.apache.geronimo.directory.DirectoryGBean">
  <attribute name="providerURL">ou=system</attribute>
  <attribute name="securityAuthentication">simple</attribute>
  <attribute name="securityPrincipal">uid=admin,ou=system</attribute>
  <attribute name="securityCredentials">secret</attribute>
  <attribute name="anonymousAccess">true</attribute>
  <attribute name="enableNetworking">true</attribute>
  <attribute name="host">0.0.0.0</attribute>
  <attribute name="port">1389</attribute>
  <reference name="ServerInfo">
    <module>geronimo/j2ee-system/1.1-SNAPSHOT/car</module>
    <name>ServerInfo</name>
  </reference>
</gbean>
```

...

# Using Geronimo

- **Download it from...**



- **Currently available in 2 forms**
  - Tomcat
  - Jetty
  - Installer soon...
  - More assemblies to come...
- **Available as ZIP or TGZ**
  - Unzip/Untar In your favorite location

# Directory Structure

```
$GERONIMO_HOME
|
+---/bin
|
+---/config-store
|
+---/deploy
|
+---/docs
|
+---/lib
|
+---/repository
|
+---/schema
|
+---/var
```

# VAR Directory Structure

```

$GERONIMO_HOME/var
|
+---activemq
|
+---catalina
|
+---config---+
|               |               |
|               +---config.xml  |
|               |               |
+---derby       |               |
|               |               |
+---ldap        |               |
|               |               |
+---log-----+
|
+---security---+---keystore
|               |
+---temp       +---users.properties
|               |
+---txlog      +---groups.properties
    
```

# REPOSITORY Directory Structure

```

$GERONIMO_HOME/repository
|
+---/...
|
+---/commons-logging---+
|                         |
|                         +---/jars---+
|                         |
|                         +---commons-logging-1.0.4.jar
|
|
+---/...
    
```

# BIN Directory Structure

```
$GERONIMO_HOME/bin
|
+---/client.jar
|
+---/server.jar
|
+---/deploy.sh (bat)
|
+---/geronimo.sh (bat)
|
+---/setjavaenv.sh (bat)
|
+---/startup.sh (bat)
|
+---/shutdown.sh (bat)
```

# Starting Geronimo

- **startup.sh**
- **geronimo.sh**
- **java -jar ./server.jar**

Usage: `geronimo.sh command [geronimo_args]`

commands:

<code>debug</code>	Debug Geronimo in jdb debugger
<code>jpda start</code>	Start Geronimo under JPDA debugger
<code>run</code>	Start Geronimo in the foreground
<code>start</code>	Start Geronimo in the background
<code>stop</code>	Stop Geronimo
<code>stop --force</code>	Stop Geronimo (followed by <code>kill -KILL</code> )

args for `debug`, `jpda start`, `run` and `start` commands:

<code>--quiet</code>	No startup progress
<code>--long</code>	Long startup progress
<code>-v --verbose</code>	INFO log level
<code>-vv --veryverbose</code>	DEBUG log level
<code>--override</code>	Override configurations. USE WITH CAUTION!
<code>--help</code>	Detailed help.

args for `stop` command:

<code>--user</code>	Admin user
<code>--password</code>	Admin password
<code>--port</code>	RMI port to connect to

# Stopping Geronimo

- **shutdown.sh**
- **geronimo.sh stop**
- **java -jar shutdown.jar**
- **The old 2 finger salute**
  - **Contol-C (or Break)**
  - **Kicks in the Java shutdown hook for Geronimo**

# Geronimo Running Foreground...

```
[*****] 100% 59s Startup complete
```

```
Listening on Ports:
```

```
1099 0.0.0.0 RMI Naming
1389 0.0.0.0 Apache Directory LDAP
1527 0.0.0.0 Derby Connector
4201 0.0.0.0 ActiveIO Connector EJB
4242 0.0.0.0 Remote Login Listener
8009 0.0.0.0 Tomcat Connector AJP
8080 0.0.0.0 Tomcat Connector HTTP
9091 0.0.0.0 Tomcat Connector Blah
61616 0.0.0.0 ActiveMQ Message Broker Connector
```

```
Started Application Modules:
```

```
EAR: geronimo/daytrader-derby-tomcat/1.0/car
EAR: geronimo/uddi-tomcat/1.0/car
EAR: geronimo/webconsole-tomcat/1.0/car
RAR: geronimo/activemq/1.0/car
RAR: geronimo/system-database/1.0/car
WAR: geronimo/jmxdebug-tomcat/1.0/car
WAR: geronimo/jsp-examples-tomcat/1.0/car
WAR: geronimo/ldap-demo-tomcat/1.0/car
WAR: geronimo/remote-deploy-tomcat/1.0/car
WAR: geronimo/servlets-examples-tomcat/1.0/car
WAR: geronimo/welcome-tomcat/1.0/car
```

# Geronimo Running Foreground...

Web Applications:

<http://powerbook.local:8080/>

<http://powerbook.local:8080/console>

<http://powerbook.local:8080/console-standard>

<http://powerbook.local:8080/daytrader>

<http://powerbook.local:8080/debug-tool>

<http://powerbook.local:8080/jsp-examples>

<http://powerbook.local:8080/juddi>

<http://powerbook.local:8080/ldap-demo>

<http://powerbook.local:8080/remote-deploy>

<http://powerbook.local:8080/servlets-examples>

Geronimo Application Server started

# Web Startup

Apache Geronimo

http://localhost:8080/

**APACHE GERONIMO**  
Welcome!

Apache Tomcat/5.5.9

**Documentation**

- [FAQ](#)
- [Wiki](#)
- [Geronimo Documentation](#)
- [Additional Documentation](#)

**Geronimo Online**

- [The Geronimo Home Page](#)
- [Problem Tracking Database](#)
- [Users Mailing List Archive](#)
- [Developers Mailing List Archive](#)
- [Geronimo IRC chat](#)

**Geronimo Examples**

- [Servlet Examples](#)
- [JSP Examples](#)
- [LDAP Demo](#)
- [Additional Samples](#)

**If you're seeing this page via a web browser, it means you've setup Apache Geronimo™ successfully. Congratulations!**

As you may have guessed by now, this is the default home page for Geronimo. If you're seeing this page, and you don't think you should be, then either you're either a user who has arrived at new installation of Geronimo, or you're an administrator who hasn't got his/her setup quite right. If you need help setting up or administering Geronimo, see the [Geronimo Documentation](#).

If you'd like to get started configuring Geronimo and the applications and services available in Geronimo, you might want to start with the Geronimo [Admin Console](#) (if this is your first time using Geronimo, the admin username is probably "system" with password "manager", though if you used the installer you got to choose your own during the installation).

**Would you like your application to appear at this URL?**

To set the context root for a web application, you can write a Geronimo deployment plan that uses the `context-root` element to specify the URL prefix used to reach that application. If you specify a context root of `/*` then the application will appear at this URL. However, you'll need to stop this small Welcome application first!

Your web deployment plan should look like this, and you can either pack it into the WAR at `WEB-INF/geronimo-web.xml` or provide it as a separate argument to the deploy tool.

```
<web-app xmlns="http://geronimo.apache.org/xml/ns/j2ee/web-1.0"
  configId="MyApplication">
  <context-root>/</context-root>
  <context-priority-classloader>>false</context-priority-classloader>
</web-app>
```

Then you can stop this application and deploy yours from the [Admin Console](#) or from the command line with a sequence of commands like this:

```
java -jar bin/deployer.jar stop geronimo/welcome-tomcat/1.0/car
java -jar bin/deployer.jar deploy MyWebApp.war
```

Geronimo mailing lists are available at the Geronimo project web site:

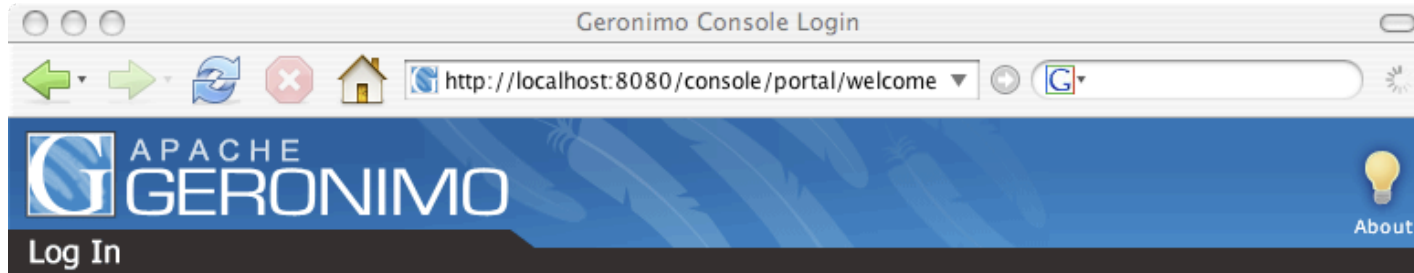
- [user@geronimo.apache.org](mailto:user@geronimo.apache.org) for general questions related to configuring and using Geronimo
- [dev@geronimo.apache.org](mailto:dev@geronimo.apache.org) for developers working on Geronimo

Thanks for using Geronimo!

Done

Adblock

# Web Console



**Log In to the Geronimo Console**

**Username:**

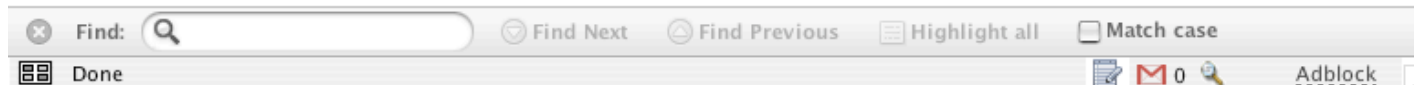
**Password:**

**Welcome to the Geronimo™ Console**

**GERONIMO™** is a Java-certified, production-grade platform designed to allow developers to rapidly deploy and manage their applications. The result is an integrated, highly functional application platform that leverages the latest innovations from the open source community and simplifies application deployment and maintenance.

**Geronimo™** has integrated the following components:

- Application server (Apache Geronimo)
- Web server and servlet engine (Tomcat)
- Web server and servlet engine (Jetty)
- JSP compiler (Jasper)
- Relational database (Apache Derby)
- Messaging (ActiveMQ)
- User management services
- Centralized administration console



## Web Console Continued.

The screenshot shows the Apache Geronimo Server Console web interface in a browser window. The browser address bar shows `http://localhost:8080/console/portal/welcome`. The page has a blue header with the Apache Geronimo logo and navigation links for "About" and "Log Out".

The main content area is titled "Welcome to the Apache Geronimo™ Administration Console!". It contains the following text:

The administration console provides a convenient, user friendly way to administer many aspects of the Geronimo Server. It is currently a work in progress, and will continue to evolve over time. The navigation panel on the left-hand side of the screen provides easy access to the individual tasks available in the console.

This space is the main content area where the real work happens. Each view contains one or more portlets (self contained view fragments) that typically include a link for help in the header. Look at the top of this portlet for an example and try it out.

The references on the right are provided so that you can learn more about Apache Geronimo, its capabilities, and what might be coming in future releases.

Mailing lists are available to get involved in the development of Apache Geronimo or to ask questions of the community:

- [user@geronimo.apache.org](mailto:user@geronimo.apache.org) ([archives](#)) for general questions related to configuring and using Geronimo
- [dev@geronimo.apache.org](mailto:dev@geronimo.apache.org) ([archives](#)) for developers working on Geronimo

So share your experiences with us and let us know how we can make Geronimo even better.

**Thanks for using Geronimo!**

The left sidebar, titled "Console Navigation", lists various sections:

- Welcome
- Server
  - Information
  - JVM
  - Server Logs
  - Shutdown
  - Web Server
  - JMS Server
- Services
  - Common Libraries
  - Database Pools
  - JMS
- Applications
  - Deploy New
  - Application EARs
  - Web App WARs
  - EJB JARs
  - J2EE Connectors
  - App Clients
  - System Modules
- Security
  - Console Realm
  - Security Realms
  - Keystore
- Misc
  - Embedded DB
    - DB Info
    - DB Manager

The right sidebar contains three sections:

- Common Console Actions**
  - Database Pools
  - Security Realms
  - JMS Resources
  - Deploy Applications
  - Web Server Ports
  - Memory & Uptime
- Geronimo Online**
  - [The Geronimo Home Page](#)
  - [Problem Tracking Database](#)
  - [Users Mailing List Archive](#)
  - [Developers Mailing List Archive](#)
  - [Geronimo IRC chat](#)
- Geronimo Documentation**
  - [FAQ](#)
  - [Wiki](#)
  - [Geronimo Documentation](#)
  - [Additional Documentation](#)

At the bottom right, there is a "POWERED BY" logo for Apache Geronimo and the following text: "Copyright © 1999-2005 Apache Software Foundation All Rights Reserved".

The browser's search bar at the bottom shows "Find:" with a search icon and options for "Find Next", "Find Previous", "Highlight all", and "Match case". The address bar at the very bottom shows `http://marc.theaimsgroup.com/?i=geronimo-user&r=1&w=2`.

# Deploying Applications

- **Web Console**



The screenshot shows a web console window titled "Install New Applications" with a "help [view]" link in the top right corner. The interface contains two input fields: "Archive:" and "Plan:", each followed by a "Browse..." button. Below these fields is a checked checkbox labeled "Start app after install" and an "Install" button at the bottom.

- **The deployer directory**

- Use for development only...Not recommended for production

- **The deployer tool - deployer.sh (bat) script**

- `deployer.sh --user system --password manager deploy [war/jar/ear] [plan file]`

# Deployer Tool

Command-line deployer syntax:

```
deployer [general options] command [command options]
```

The general options are:

```
--uri  
--host  
--port  
--driver  
--user  
--password  
--syserr  
--verbose
```

The available commands are:

1. Common Commands
  - deploy
  - login
  - redeploy
  - start
  - stop
  - undeploy
2. Other Commands
  - distribute
  - list-modules
  - list-targets

# Plan Files

- **What is a plan file?**
  - XML document (External or Internal depending on nature of plan file)
  - Descriptor to extend application
    - **geronimo-application.xml - embedded**
    - **geronimo-web.xml - embedded**
    - **geronimo-ra.xml - embedded**
    - **Any name you desire - external**
  - Describes...
    - **GBean's attributes and references**
    - **GBean's dependencies**
  - Many different types of plans to describe information
    - **Web, Application, Resource Adapters, Security**
    - **Security, Naming References, EJB**
    - **Schemas found in the schema directory**

# Elements of a plan file

```
<configuration
  configId="geronimo/directory/1.1-SNAPSHOT/car"
  xmlns="http://geronimo.apache.org/xml/ns/deployment-1.0">

  <import>
    <groupId>geronimo</groupId>
    <type>car</type>
    <artifactId>j2ee-server</artifactId>
    <version>1.1-SNAPSHOT</version>
  </import>

  <dependency>
    <groupId>geronimo</groupId>
    <artifactId>geronimo-directory</artifactId>
    <version>1.1-SNAPSHOT</version>
  </dependency>

  ...
```

```
...
  <gbean gbeanName="geronimo.server:name=DirectoryService"
        class="org.apache.geronimo.directory.DirectoryGBean">
    <attribute name="providerURL">ou=system</attribute>
    <attribute name="securityAuthentication">simple</attribute>
    <attribute name="securityPrincipal">uid=admin,ou=system</attribute>
    <attribute name="securityCredentials">secret</attribute>
    <attribute name="anonymousAccess">true</attribute>
    <attribute name="enableNetworking">true</attribute>
    <attribute name="host">0.0.0.0</attribute>
    <attribute name="port">1389</attribute>
    <reference name="ServerInfo">
      <module>geronimo/j2ee-system/1.1-SNAPSHOT/car</module>
      <name>ServerInfo</name>
    </reference>
  </gbean>
</configuration>
```

## Elements of a plan file - web

```
<?xml version="1.0" encoding="UTF-8"?>  
<web-app configId="geronimo/ldap-demo-tomcat/1.1-SNAPSHOT/car"  
  parentId="geronimo/ldap-realm/1.1-SNAPSHOT/car"  
  xmlns="http://geronimo.apache.org/xml/ns/j2ee/web/tomcat-1.0"  
  xmlns:sec="http://geronimo.apache.org/xml/ns/security">
```

```
  <context-root>/ldap-demo</context-root>  
  <context-priority-classloader>>false</context-priority-classloader>
```

...

```
...
<security-realm-name>ldap-realm</security-realm-name>
<security>
  <default-principal realm-name="ldap-realm">
    <principal class="org.apache.geronimo.security.realm.providers.GeronimoUserPrincipal"
      name="system"/>
  </default-principal>
  <role-mappings>
    <role role-name="content-administrator">
      <realm realm-name="ldap-realm">
        <principal class="org.apache.geronimo.security.realm.providers.GeronimoGroupPrincipal"
          name="admin" designated-run-as="true"/>
        <principal class="org.apache.geronimo.security.realm.providers.GeronimoUserPrincipal"
          name="system"/>
      </realm>
    </role>
    <role role-name="guest">
      <realm realm-name="ldap-realm">
        <principal class="org.apache.geronimo.security.realm.providers.GeronimoGroupPrincipal"
          name="guest" designated-run-as="true"/>
        <principal class="org.apache.geronimo.security.realm.providers.GeronimoUserPrincipal"
          name="user1"/>
        <principal class="org.apache.geronimo.security.realm.providers.GeronimoUserPrincipal"
          name="user2"/>
      </realm>
    </role>
  </role-mappings>
</security>
</web-app>
```

# Configuring Geronimo - config.xml

```
<attributes xmlns="http://geronimo.apache.org/xml/ns/attributes">
...
  <configuration name="geronimo/tomcat/1.0/car">
    ...
    <gbean name="TomcatWebConnector">
      <attribute name="host">0.0.0.0</attribute>
      <attribute name="port">8080</attribute>
      <attribute name="redirectPort">8443</attribute>
    </gbean>
    <gbean name="TomcatWebSSLConnector" load="false">
    </gbean>
    <gbean name="geronimo.server:J2EEApplication=null,J2EEModule=geronimo/tomcat/1.0/
car,J2EEServer=geronimo,j2eeType=Host,name=TomcatSecondHost"
gbeanInfo="org.apache.geronimo.tomcat.HostGBean">
      <attribute name="className">org.apache.catalina.core.StandardHost</attribute>
      <attribute name="initParams">
        name=www.example.com
        appBase=
        workDir=work</attribute>
      <attribute name="aliases">www.example.net, www.example.org</attribute>
    </gbean>
    ...
  </configuration>
...
</attributes>
```

# Configuring Application Servers



# Configuring Geronimo - Web Console



# Configuring Geronimo Web Console

- **Logging - Server Logs**

**Log Manager**

Config File

Refresh Period

Log Level  ▼

- **Connectors - Web Server**

Network Listeners						<a href="#">help</a> <a href="#">[view]</a>
Name	Protocol	Port	State	Actions	Type	
TomcatWebConnector-HTTP-Blah	HTTP	9091	running	<a href="#">stop</a> <a href="#">edit</a> <a href="#">delete</a>	Tomcat Connector	
TomcatAJPConnector	AJP	8009	running	<a href="#">stop</a> <a href="#">edit</a> <a href="#">delete</a>	Tomcat Connector	
TomcatWebConnector	HTTP	8080	running	<a href="#">stop</a> <a href="#">edit</a> <a href="#">delete</a>	Tomcat Connector	

[Add new HTTP listener for Tomcat](#)  
[Add new HTTPS listener for Tomcat](#)  
[Add new AJP listener for Tomcat](#)

# Configuring Geronimo - Connector Wizard

## Network Listeners

[help](#) [\[view\]](#)

### Add new HTTPS listener for Tomcat

Unique  
Name:

A name that is different than the name for any other web connectors in the server (no spaces in the name please)

Host:

The host name or IP to bind to. The normal values are 0.0.0.0 (all interfaces) or localhost (local connections only)

Port:

The network port to bind to.

Max  
Threads:

The maximum number of threads this connector should use to handle incoming requests

### SSL Settings

Keystore  
File:

The file that holds the keystore (relative to the Geronimo install dir)

Keystore  
Password:

Set the password used to access the keystore file. This is also the password used to access the server private key within the keystore (so the two passwords must be set to be the same on the keystore).

Keystore  
Type:

# Configuring Geronimo - Repository

**Repository Viewer**
[help](#) [\[view\]](#)

### Add Archive to Repository

File:

Group:

Artifact:

Version:

Type:

**Current Repository Entries**

- activecluster/activecluster-1.2/20051115174934/jar
- activeio/activeio/2.0-r118/jar
- activemq/activemq-core/3.2.1/jar

# Configuring Geronimo - Start/Stop/Remove Components

Installed System Modules		[view]	
Component Name	State	Commands	
geronimo/activemq-broker/1.0/car	running	<a href="#">Stop</a>	<a href="#">Uninstall</a>
geronimo/client-corba/1.0/car	stopped	<a href="#">Start</a>	<a href="#">Uninstall</a>
geronimo/client-security/1.0/car	stopped	<a href="#">Start</a>	<a href="#">Uninstall</a>
geronimo/client-system/1.0/car	stopped	<a href="#">Start</a>	<a href="#">Uninstall</a>
geronimo/client/1.0/car	stopped	<a href="#">Start</a>	<a href="#">Uninstall</a>
geronimo/directory/1.0/car	running	<a href="#">Stop</a>	<a href="#">Uninstall</a>
geronimo/geronimo-gbean-deployer/1.0/car	running	<a href="#">Stop</a>	<a href="#">Uninstall</a>
geronimo/hot-deployer/1.0/car	running	<a href="#">Stop</a>	<a href="#">Uninstall</a>
geronimo/j2ee-corba/1.0/car	stopped	<a href="#">Start</a>	<a href="#">Uninstall</a>
geronimo/j2ee-deployer/1.0/car	running	<a href="#">Stop</a>	<a href="#">Uninstall</a>
geronimo/j2ee-security/1.0/car	running	<a href="#">Stop</a>	<a href="#">Uninstall</a>
geronimo/j2ee-server/1.0/car	running	<a href="#">Stop</a>	<a href="#">Uninstall</a>
geronimo/j2ee-system/1.0/car	running	<a href="#">Stop</a>	<a href="#">Uninstall</a>
geronimo/ldap-realm/1.0/car	running	<a href="#">Stop</a>	<a href="#">Uninstall</a>
geronimo/online-deployer/1.0/car	stopped	<a href="#">Start</a>	<a href="#">Uninstall</a>
geronimo/rmi-naming/1.0/car	running	<a href="#">Stop</a>	<a href="#">Uninstall</a>
geronimo/shutdown/1.0/car	stopped	<a href="#">Start</a>	<a href="#">Uninstall</a>
geronimo/tomcat-deployer/1.0/car	running	<a href="#">Stop</a>	<a href="#">Uninstall</a>
geronimo/tomcat/1.0/car	running	<a href="#">Stop</a>	<a href="#">Uninstall</a>

# Configuring Geronimo - Start/Stop/Remove Applications

## Installed Web Applications

[\[view\]](#)

Component Name	State	Commands	
geronimo/jmxdebug-tomcat/1.0/car	running	<a href="#">Stop</a>	<a href="#">Uninstall</a>
geronimo/jsp-examples-tomcat/1.0/car	running	<a href="#">Stop</a>	<a href="#">Uninstall</a>
geronimo/ldap-demo-tomcat/1.0/car	running	<a href="#">Stop</a>	<a href="#">Uninstall</a>
geronimo/remote-deploy-tomcat/1.0/car	running	<a href="#">Stop</a>	<a href="#">Uninstall</a>
geronimo/servlets-examples-tomcat/1.0/car	running	<a href="#">Stop</a>	<a href="#">Uninstall</a>
geronimo/welcome-tomcat/1.0/car	stopped	<a href="#">Start</a>	<a href="#">Uninstall</a>

# Configuring Geronimo - Keystore

Keystore Configuration				[view]
keystore-type	keystore-provider	keystore-location	keystore-size	
jks	SUN	var/security/ssl-keystore-1	0	

**Tools:** [import trusted certificate](#) [generate key pair](#)

**details** **alias-name** **alias-type** **modified**

Keystore Configuration		[view]
<b>Generate Key Pair</b>		
Alias:	<input type="text"/>	
Key Algorithm:	<input checked="" type="radio"/> RSA	
Key Size:	<input type="radio"/> 512 <input checked="" type="radio"/> 1024 <input type="radio"/> 2048	
Signature Algorithm:	<input type="radio"/> MD2withRSA <input checked="" type="radio"/> MD5withRSA <input type="radio"/> SHA1withRSA	
Validity:	<input type="text"/>	
Common Name (CN):	<input type="text"/>	
Organizational Unit (OU):	<input type="text"/>	
Organizational Name (O):	<input type="text"/>	
Locality (L):	<input type="text"/>	
State (ST):	<input type="text"/>	
Country (C):	<input type="text"/>	
<input type="button" value="Submit"/> <input type="button" value="Reset"/> <input type="button" value="Cancel"/>		

# Configuring Geronimo - DB Pools

## Database Pools

[\[view\]](#)

This page lists all the available database pools.

For each pool listed, you can click the **usage** link to see examples of how to use the pool from your application.

Name	Deployed As	State	Actions
SystemDatasource	Server-wide	running	<a href="#">edit</a> <a href="#">usage</a>
jdbc/TradeDataSource	geronimo/daytrader-derby-tomcat/1.0/car	running	<a href="#">edit</a> <a href="#">usage</a>
jdbc/juddiDB	geronimo/uddi-tomcat/1.0/car	running	<a href="#">edit</a> <a href="#">usage</a>

Create a new database pool:

- [Using the Geronimo database pool wizard](#)
- [Import from JBoss 4](#)
- [Import from WebLogic 8.1](#)

# Configuring Geronimo - DB Pools JBoss Conversion

## Database Pools

[\[view\]](#)

### Import Database Pools -- Step 1: Upload Configuration File

This page starts the process of importing database pools from another application server. To do the import, you'll need to upload a configuration file from the other server using the fields below. After that, we'll convert the values we can, and ask you to confirm the configuration for each pool we find in the configuration.

### JBoss 4 Import

**Config File:**

Please select the \*-ds.xml file from the jboss4/server/name/deploy directory.

[Cancel](#)

# Configuring Geronimo - DB Pools Wizard

**Database Pools** [view]

**Create Database Pool -- Step 1: Select Name and Database**

**Name of Database Pool:**

A name that is different than the name for any other database pools in the server (no spaces in the name please).

**Database Type:**

The type of database the pool will connect to.

[Cancel](#)

**Database Pools**[\[view\]](#)**Create Database Pool -- Step 2: Select Driver, JAR, Parameters****JDBC Driver Class:** 

See the documentation for your JDBC driver.

**Driver JAR:** The JAR holding the selected JDBC driver. Should be installed under Geronimo/repository/ (or [Download a Driver](#) )**DB User Name:** 

The username used to connect to the database

**DB Password:** 

The password used to connect to the database

**Driver Connection Properties****Typical JDBC URL:** `jdbc:mysql://<Host>:<Port>/<Database>`**Port:** 

A property used to connect to MySQL. May be optional (see JDBC driver documentation).

**Host:** 

A property used to connect to MySQL. May be optional (see JDBC driver documentation).

**Database:** 

A property used to connect to MySQL. May be optional (see JDBC driver documentation).

[Cancel](#)

**Database Pools**[\[view\]](#)**Create Database Pool -- Step 2: Select Driver, JAR, Parameters**

This page lets you automatically download a driver for a database where the driver JARs are available online without login or registration.

*If this page took a very long time to load and there are no drivers listed in the box below, it probably means your Geronimo installation can't connect to apache.org to retrieve the driver download configuration file. Sorry for the inconvenience, you'll have to try again later or install the driver by hand (copy it to a directory under geronimo/repository/)*

**Select Driver:**  ▾

A driver that Geronimo can download automatically for you.

[Return to List](#)

## What Geronimo doesn't have

- **Full clustering with respect to EJB/JNDI/Distributed cache.**
  - It *does* have full clustering with session replication and fail-over for the Tomcat web component which fits 90% of clustering use cases. Uses Tomcat Clustering GBeans.
- **Can't run with Java 5...only runs with Java 1.4.2.**
  - Why?

## Concerns...

- **Can I use Geronimo Now? Is it ready for PrimeTime?**
  - YES!!!
- **Its new, is it ready for the Enterprise?**
  - YES!!! J2EE 1.4 Certified...it is guaranteed to run your applications
  - Check it out for yourself! Geronimo has some great company!
    - <http://java.sun.com/j2ee/compatibility.html>
- **1.0 argument does not really apply**
  - (Well it kind of applies) But mostly not - Why?

## What's Next?

- **Robust Clustering - Not just Web and JMS**
- **Even More User Friendly Configuration and Application Management.**
- **More assemblies**
- **Run with Java 5 - Yoko will fix this...**
- **Java EE 5? Geronimo 2.0 - Specs Underway**
- **Much, much more...**
  - <http://opensource2.atlassian.com/confluence/oss/display/GERONIMO/>

# Get Involved!

- Visit us at:



**Apache Geronimo**

<http://geronimo.apache.org/>

- IRC

- [#geronimo](irc:freenode.net)

- Mailing lists

- [dev@geronimo.apache.org](mailto:dev@geronimo.apache.org)
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# Questions

